Amendments to the claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-17. (Canceled)

18. (Currently Amended): An immunotherapeutic vaccine comprising:
(a) a first part comprising a first recombinant vaccinia virus encoding at least one first immunostimulating molecule; and
(b) a second part comprising antigen presenting cells, which are capable of inducing T-cell activation, wherein the antigen presenting cells are dendritic cells and/or a monocytes, and which are autologous; or syngeneic ~~or allogeneic~~, pulsed with a preparation comprising enucleated cytosol and cell membranes of cancer cells infected with a recombinant vaccinia virus encoding at least one second immunostimulating molecule.

19. (Original): The vaccine of claim 18, wherein the enucleated cytosol is substantially free of nuclei.

20. (Original): The vaccine of claim 18, wherein the cell membranes comprise at least two HLA class I A antigens.

21. (Original): The vaccine of claim 18, wherein the first recombinant vaccinia virus is a live virus.

22. (Original): The vaccine of claim18, wherein the second recombinant vaccinia virus is either live or inactivated.

23. (Original): The vaccine of claim 18, wherein the first immunostimulating molecule is IL-2.

24-25. (Canceled)

26. (Original): The vaccine of claim 18, wherein the second immunostimulating molecule is IL-2.

27-28. (Canceled)

29. (Original): The vaccine of claim 18, wherein the antigen presenting cells are dendritic cells or monocytes.

30. (Original): The vaccine of claim 18, wherein the antigen presenting cells are dendritic

cells and monocytes.

31. (Original): The vaccine of claim 18, wherein the antigen presenting cells are autologous cells.

32. (Original): The vaccine of claim 18, wherein the antigen presenting cells are HLA-matched to a host to be treated.

33. (Original): The vaccine of claim 18, wherein the cancer cells are melanoma cells.

34. (Original): The vaccine of claim 33, wherein the melanoma cells comprise one or more cells from the group consisting of Mel-2, Mel-3, Mel-4, Mel-6, and Mel-9.

35. (Original): The vaccine of claim 18, wherein the cancer cells are established cancer cell lines.

36. (Original): The vaccine of claim 18, wherein the cancer cells are selected from the group consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, Kaposi's sarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, rhabdosarcoma, colorectal carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, meningioma, neuroblastoma, retinoblastoma, myeloma, lymphoma, and leukemia cells.

37. (Original): The vaccine of claim 35, wherein the cancer cell lines are selected from the group of cancer cell lines consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, Kaposi's sarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, rhabdosarcoma, colorectal carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, pinealoma,

hemangioblastoma, acoustic neuroma, oligodendroglioma, meningioma, neuroblastoma, retinoblastoma, myeloma, lymphoma, and leukemia cell lines.

38. (Original): The vaccine of claim 18, wherein the cancer cells are harvested from a host to be treated with the composition.

39-54. (Canceled)

55. (Currently Amended): A method for eliciting an anti-cancer immune response in a subject, which comprises:
(a) administering a first recombinant vaccinia virus encoding at least one first immunostimulating molecule; and
(b) administering a composition comprising antigen presenting cells, which are capable of inducing T cell activation, wherein the antigen presenting cells area dendritic cells and/or a monocytes, and which are autologous; or syngeneic ~~or allogeneic~~, pulsed with a preparation comprising enucleated cytosol and cell membranes of cancer cells, which are derived from the subject or are the same type of cancer cells as patient-derived cancer cells, as infected with a second recombinant vaccinia virus encoding at least one second immunostimulating molecule; and
(c) wherein administration of said first recombinant vaccinia virus and said composition is at or near lymph node(s).

56. (Currently Amended): The method of claim 55, wherein ~~about~~ 10^4 to ~~about~~ 10^8 PFU of the first recombinant vaccinia virus is provided.

57. (Currently Amended): The method of claim 55, wherein ~~about~~ 10^7 PFU of the first recombinant vaccinia virus is provided.

58. (Currently Amended): The method of claim 55, wherein ~~about~~ 10^5 to ~~about~~ 10^7 antigen presenting cells are provided.

59. (Currently Amended): The method of claim 55, wherein ~~about~~ 10^6 to ~~about~~ $5x10^6$ antigen presenting cells are provided.

60. (Original): The method of claim 56, wherein the enucleated cytosol is substantially free of nuclei.

61. (Original): The method of claim 56, wherein the cell membranes comprise at least two HLA class I A antigens.

62. (Original): The method of claim 56, wherein the first recombinant vaccinia virus is a live virus.

63. (Original): The method of claim 56, wherein the second recombinant vaccinia virus is either live or inactivated.

64. (Original): The method of claim 56, wherein the first immunostimulating molecule is IL-2.

65-66. (Canceled)

67. (Original): The method of claim 56, wherein the second immunostimulating molecule is IL-2.

68-69. (Canceled)

70. (Original): The method of claim 56, wherein the antigen presenting cells are dendritic cells or monocytes.

71. (Original): The method of claim 56, wherein the antigen presenting cells are dendritic cells and monocytes.

72. (Original): The method of claim 56, wherein the antigen presenting cells are autologous cells.

73. (Original): The method of claim 56, wherein the antigen presenting cells are HLA-matched cells to the subject.

74. (Original): The method of claim 56, wherein the cancer cells are melanoma cells.

75. (Original): The method of claim 75, wherein the melanoma cells comprise one or more cells selected from the group consisting of Mel-2, Mel-3, Mel-4, Mel-6, and Mel-9.

76. (Original): The method of claim 56, wherein the cancer cells are established cancer cell lines.

77. (Original): The method of claim 56, wherein the cancer cells are from the subject.

78. (Currently Amended): A method of treating cancer in a subject, which comprises:
(a) administering a first live recombinant vaccinia virus encoding at least one first immunostimulating molecule; and
(b) administering an effective amount of a composition comprising antigen presenting cells ~~and~~ which are autologous~~;~~ or syngeneic ~~or allogeneic~~, and which are capable of inducing T-cell activation, wherein the antigen

presenting cells are dendritic cells and/or monocytes, pulsed with a preparation comprising enucleated cytosol and cell membranes of cancer cells, which are derived from the subject or the same type of cancer cells as patient-derived cancer cells, infected with a second recombinant vaccinia virus encoding ~~for~~ at least one second immunostimulating molecule; and

(c) wherein administration of said first recombinant vaccinia virus and said composition is at or near lymph node(s).

79. (Original): The method of claim 78, wherein the first live recombinant vaccinia virus encodes IL-2.

80. (Currently Amended): The method of claim 78, wherein ~~about~~ 10^5 to ~~about~~ 10^7 PFU of the first live recombinant vaccinia virus is provided.

81. (Currently Amended): The method of claim 78, wherein enucleated cytosol and cell membranes equivalent to ~~about~~ 10^6 to ~~about~~ 10^7 cancer cells are provided.

82. (Original): The method of claim 78, wherein at least one treatment is administered.

83. (Original): The method of claim 78, wherein parts said first recombinant vaccinia virus and said composition are injected subcutaneously in at least one site selected from the group consisting of an anterior thigh, an upper arm, or the anterior thorax.

84. (Original): The method of claim 78, wherein the at least one site is near regional lymph nodes.

85. (Original): The method of claim 78, wherein step (a) is carried out before step (b).

86. (Original): The method of claim 85, wherein steps (a) and (b) are carried out in substantially the same site.

87. (Original): The method of claim 78, wherein step (a) is carried out about thirty minutes prior to step (b).

88. (Original): The method of claim 78, wherein the cancer is a melanoma.

89. (Original): The method of claim 78, wherein the cancer cells are melanoma cells.

90. (Original): The method of claim 78, wherein the cancer is selected from the group consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, Kaposi's sarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, rhabdosarcoma, colorectal

carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, meningioma, neuroblastoma, retinoblastoma, myeloma, lymphoma, and leukemia.

91. (Original): The method of claim 78, wherein the cancer cells are from cancers selected from the group consisting of fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, Kaposi's sarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, rhabdosarcoma, colorectal carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, meningioma, neuroblastoma, retinoblastoma, myeloma, lymphoma, and leukemia.

92. (Original): The method of claim 78, wherein the enucleated cytosol is substantially free of nuclei.

93. (Original): The method of claim 78, wherein the cell membranes comprise at least two HLA class I A antigens.

94. (Original): The method of claim 78, wherein the first recombinant vaccinia virus is either live or inactivated.

95. (Original): The method of claim 78, wherein the second recombinant vaccinia virus is either live or inactivated.

96. (Original): The method of claim 78, wherein the first immunostimulating molecule is IL-2.

97-98. (Canceled)

99. (Original): The method of claim 78, wherein the second immunostimulating molecule is IL-2.

100-101. (Canceled)

102. (Original): The method of claim 78, wherein the antigen presenting cells are dendritic cells or monocytes.

103. (Original): The method of claim 78, wherein the antigen presenting cells are dendritic cells and monocytes.

104. (Original): The method of claim 78, wherein the antigen presenting cells are autologous cells.

105. (Original): The method of claim 78, wherein the antigen presenting cells are HLA-matched to the subject.

106. (Original): The method of claim 78, wherein the cancer cells are from the subject.

107. (Original): The method of claim 78, wherein the subject is a human.